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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/752,673	01/08/2004	Makoto Tatemura	ASA-967-02	4455
24956	7590	06/03/2005	EXAMINER	
MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.			WANG, GEORGE Y	
1800 DIAGONAL ROAD			ART UNIT	
SUITE 370			PAPER NUMBER	
ALEXANDRIA, VA 22314			2871	

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Sm

Office Action Summary	Application No.	Applicant(s)	
	10/752,673	TATEMURA ET AL.	
	Examiner	Art Unit	
	George Y. Wang	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-30 is/are pending in the application.
- 4a) Of the above claim(s) 16-20 and 24-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 9, 2005 has been entered.

Election/Restrictions

2. Newly submitted claims 25-30 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

This application contains claims directed to the following patentably distinct species of the claimed invention:

(1) the specifics of the method of producing an LCD apparatus comprising the steps of heating the glass at a plurality of areas and generating a tensile stress on reverse surface to cut the glass substrate before the glass substrate is cut comprising a first embodiment corresponding to claims 21-23;

(2) the specifics of the method of producing an LCD apparatus comprising the steps of generating tensile stress from a lower portion on the bottom of the glass

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substrate and the actual step of cutting comprising a second embodiment corresponding to claims 25-30.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 25-30 have been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admission of Prior Art (AAPA).

5. As to claim 21, AAPA discloses a method for producing a liquid crystal display (LCD) apparatus comprising heating a surface of a glass substrate at a plurality of areas generating a tensile stress on a surface of the glass substrate based on heating the surface so as to cut the glass substrate at an area on which the tensile stress is generated (pg. 5, lines 10-19).

However, AAPA fails to specifically disclose that the tensile stress is generated on a reverse surface of the glass substrate.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to recognize that when one heats a surface of a glass substrate so that a tensile stress is generated on a surface of the glass substrate based on heat to cut the glass substrate (pg. 5, lines 10-19), tensile stress is also generated on a reverse surface of the glass substrate. In fact, AAPA discloses forming "the scribe groove by applying some heat to the glass sheet surface *around* the scribe groove predetermined line to cause some tensile stress there" (italics added for emphasis) (pg. 5, lines 14-19). Apparently, when one attempts to form a scribe groove by inducing tensile stress by localized heat, one cannot help but also heat "around" the vicinity of the groove area. Clearly, the reverse surface of a thin glass sheet qualifies as being in the heated

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vicinity. As such, tensile stress would also be generated on a reverse surface of the glass substrate for clean cutting of the sheet.

6. Regarding claims 22-23, AAPA discloses method for producing an LCD apparatus as recited above where the plurality of areas comprises two areas adjacent to each other and facing each other across a scribe groove formed on the surface (pg. 5, lines 10-19).

Response to Arguments

7. Applicant's arguments filed October 14, 2004 have been fully considered but they are not persuasive.

Applicant amended claim 21 to include the limitation "based on said heating of the surface" to further specify the generation of tensile stress. However, this limitation does not distinguish the claimed invention from AAPA since AAPA clearly teaches that "this method forms the scribe groove by applying some heat to the glass sheet surface around the scribe groove predetermined line to cause some tensile stress."

Furthermore, Applicant argues that heating the scribe groove on both sides is "novel and non-obvious." However, nothing in the claims distinguishes this "novel and non-obvious" feature since AAPA sufficient teaches heating the scribe groove on both sides so as to create a tensile stress at an opposite surface of the glass sheet in the rejection above. As a result, Rejection is proper.

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Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Y. Wang whose telephone number is 571-272-2304. The examiner can normally be reached on M-F, 8 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gw
May 31, 2005


DUNG T. NGUYEN
PRIMARY EXAMINER